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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,955	11/13/2000	Russell Gordon Speight	032802-007	5334

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EXAMINER

HEITBRINK, JILL LYNNE

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 10/01/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/601,955

Applicant(s)

SPEIGHT, RUSSELL GORDON

Examiner

Jill L. Heitbrink

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 2-35 and 40-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,36-39 and 59 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

The six phases as clearly defined on page 19 and described throughout the specification.

1. Velocity and velocity stroke, based on a single-step constant velocity;
2. Injection/Filling Velocity profiling;
3. Velocity defect elimination;
4. Packing pressure magnitude determination;
5. Gate freeze determination and pressure profiling;
6. Pressure phase defect elimination.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. The claims are deemed to correspond to the species listed above in the following manner:

Group I, claim(s) 1, 36-38, 59, drawn to a method for automated optimization set-up wherein the injection stroke and velocity are adjusted to produce a part having no defects. It is considered that the adjustment of the injection stroke and velocity to produce a part having no defects comprises a first "special technical feature". Phase 1.

Group II, claim(s) 2-16, 40-49, drawn to a method for automated optimization set-up wherein the injection velocity profile is adjusted to achieve a desired pressure profile. It is considered that adjustment of the velocity profile to achieve a desired pressure profile comprises a second "special technical feature". Phase 2 and 3

Group III, claim(s) 17-23, 50, 51, drawn to a method for automated optimization set-up wherein the kickback is determined or adjusted. It is considered that the kickback determination or adjustment comprises a third "special technical feature". Phases 4 and 6.

Group IV, claim(s) 24-32, 52-56, drawn to a method for automated optimization set-up wherein the gate freeze time is determined. It is considered that the determination of the gate freeze time comprises a fourth "special technical feature". Phase 5

The following claim(s) are generic: 33-35, 57 and 58.

3. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The groups I-IV each have a different special technical feature which is usable alone.

4. A telephone call was made to Gene Dillahunty on Sept. 24, 2002 to request an oral election to the above restriction requirement, but did not result in an election being made.

5. During a telephone conversation with Gene Dillahunty on Sept. 24, 2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1, 36-39 and 59. Affirmation of this election must be made by applicant in replying to this Office action. Claims 2-35 and 40-58 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 36-39 and 59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 1 lines 12-14 are unclear as the claimed method includes step 4 (line 3 "including the steps of:"). However, step 4 may not occur according to lines 12-14. The claim is being examined as including at least one step 4 and may include further step 4 when a further step 3 is not effective.

9. Regarding claims 38 and 59, the phrase "or any other" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or any other"), thereby rendering the scope of the claim(s) unascertainable.

10. Claim 38 is unclear as to the use of the injection pressure in the steps of claim 1. This claim may have been intended to be dependent from claim 2.

11. Claim 39 recites the limitation "said injection cylinder hydraulic pressure" in line 2. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 36 recites the limitations "said machine's velocity control response time" in line 3 and "said response time" in line 6. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1, 36-39 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunkar Pat. No. 3,767,339 taken together with either Miyoshi et al. Pat. No. 5,900,259 or Hettinga et al. Pat. No. 5,898,591.


15. Hunkar discloses a process of adjusting the injection stroke and injection velocity based on observations of the injection process which correlate to defects in the product.

Miyoshi et al. and Hettinga et al. teach that the observing of defects is performed similar by inspecting the molded parts and by the process measurements which correlate to defects in the molded parts. It would have been obvious to a person of ordinary skill in the art to inspect the parts for defects in Hunkar so as to correlate these defects to the process measurements so as to provide the necessary adjustment in the injection stroke and injection velocity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill L. Heitbrink whose telephone number is 703-308-0673. The examiner can normally be reached on Monday - Friday 9:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jan Silbaugh can be reached on 703-308-3829. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jill L. Heitbrink
Primary Examiner
Art Unit 1732

jlh
September 28, 2002